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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,319	06/21/2005	Hee-Boong Park	DSP-PT010	1309
3624 7590 04/15/2008 VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103				
EXAMINER LAMPRECHT, JOEL				
ART UNIT		PAPER NUMBER		
3737				
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04/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,319

Applicant(s)

PARK, HEE-BOONG

Examiner

JOEL M. LAMPRECHT

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 1-16 are objected to because of the following informalities: Regarding claims 1-16, there exists a plurality of improper "means plus function" language, including, but not limited to the following recitations: Claim 1 Line 2 "moveable means", claim 1 Line 4 "movable means" claim 1 Line 6, "movable means" and "driving means", claim 1 line 12, "movable means", claim 5 line 2 "height adjusting means", claim 5 line 3 "pressing means", claim 6 line 2 "height adjusting means, claim 6 line 3 "pressing means", claim 6 line 4 "movable means". Appropriate correction of all improper means plus function recitations is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al (US 2006/0241423 A1). Anderson et al disclose an apparatus for ultrasound examination of a deformable object comprising a support frame (Figure 1, element 108 [0028-0030]), movable means with a flat surface installed in the frame to move forward and backward longitudinally in the frame [0030, 0035, 36], a driving

means for moving the movable means, an ultrasonic probe disposed to extend widthwise of the movable means (Fig 2, 4b, [0040-0044]), an ultrasonic wave transmission/reception surface (Fig 4a/b) of the ultrasonic probe flush with upper surface and fixed to the movable means (Fig 4a/b), the moveable means comprising a plurality of links having a flat surface (Fig 4a/b Element 402), and a pair of rollers and supports for the ends of the links, where driving means is supplied and the ultrasonic probe is fixed between two of the links [0039-0042] (Fig 4a/b). The probe is a linear array transducer [0041], the height of the frame can be adjusted (Fig 1), and there also exists pressing means to the height adjusting means to press the deformable object on the flat surface of the movable means [0037-0040]. Also, a stand exists for supporting the height adjusting means (Fig 1 Element 102, Fig 1 Element 108 [0030]), and a rotational shaft is supplied [0030-0033], having one end supported rotably by the stand and the other end fixed to a side surface of the height adjusting means [0031].

Anderson et al also disclose a frequency based phased array scanning probe [0041-0043], a height adjusting means for supporting the frame and pressing means fixed to a height adjusting (Figure 1) means for pressing the deformable object placed on the flat surface of the movable means (Figure 2,3), and a stand for supporting the height adjusting means, along with rotational shaft having one end supported rotably by the stand and the other end fixed to the height-adjusting means (Claim 3, [0031-0032]) which is opposite to a side surface of the height adjusting means with the frame installed thereon.

Response to Arguments

Applicant's arguments filed 12/18/07 have been fully considered but they are not persuasive. Regarding the argument that Anderson fails to disclose a movable means having a flat surface on which an object is placed, the Examiner respectfully disagrees with Applicant. Anderson does indeed disclose both a flat surface above (and substantially flush to) the ultrasound imager as it sweeps across the movable means (Figures 3-4 and 0043-0047). The film sheet is not required to move as per Applicants current claim language, nor is there a distinction that the ultrasound transducer itself must be in direct physical contact with the object to be scanned. The scanning surface of Anderson is indeed supported by the movable means wherein the ultrasound transducer array is disposed (0047-0049). Note the construction of both Figures 3 and 4a/b where the moveable means would actually be considered the construct in which the movable ultrasound transducer is placed. That movable device has a frame (Note element 404) and it is attached to the frame of the object and to the film sheet which is the "flat surface". Also note the formation of the closed chamber is the movable means being considered (As seen in figure 3 and 0040-0041).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOEL M. LAMPRECHT whose telephone number is (571)272-3250. The examiner can normally be reached on Monday-Friday 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L. Casler/
Supervisory Patent Examiner, Art
Unit 3737

Art Unit: 3737

JML